Flagstaff, 1974
WPBH-1

A city in Arizona.

Builder: Grumman Aircraft Engineering Corporation, Stuart, Florida
Length: 73'; 82' o.a.
Beam: 21' 6"
Draft: 4' 4" (foils retracted); 18' (foils extended)
Displacement: 67 tons
Cost: N/A
Commissioned: 14 September 1968 (USN); 8 November 1974 (USCG on loan from USN); 2 March 1977 (USCG)
Decommissioned: 30 September 1978
Disposition: Returned to USN
Machinery: Rolls Royce Tyne gas turbine with supercavitating propeller (foil-borne); 2 General Motors diesels with water-jet pumps (hull-borne)
Performance & Endurance:
Max: 45 + knots (foil-borne)
Cruising: 8 knots (hull-borne)
Complement: 12 (1974); 13 (1977)
Armament: Small arms only
Electronics: Navigation-type radar

Cutter History:
In the mid-1970s the Coast Guard explored options to replace the aging 95-foot cutters. There was also considerable interest in developing new "high-speed ways" to combat narcotics smuggling by sea, conduct search and rescue operations, fisheries enforcement, and marine environmental protection. The Coast Guard, of course, looked for the most inexpensive way to test new platforms and when the Navy offered the use of some of their hydrofoils at "virtually no cost," the Coast Guard jumped on the opportunity. The Navy loaned the Coast Guard both the USS *Flagstaff* (PGH-1) and USS *High Point* (PCH-1) for a short period beginning in late-1974. The *Flagstaff* was scheduled for evaluation first and *High Point* was scheduled for evaluation in early 1975.
Flagstaff was developed by the Navy as an experimental vessel and was built by Grumman Aerospace Corporation of Bethpage, New York. She was delivered to the Navy in September of 1968. After an operational evaluation period she was deployed to South Vietnam with her sister ship USS *Tucumcari* (PGH-2). She conducted patrol missions there until 1970. Upon her return to the U.S. in 1970, she was assigned to the Amphibious Forces of the Pacific Fleet where she participated in numerous readiness trials and training exercises and was also used as a test-bed for various craft subsystems, for the Navy's Advanced Hydrofoil Development Program.
Both *Flagstaff* and *High Point* were scheduled for evaluation by the Coast Guard Hydrofoil Test and Evaluation Team, under guidance from the Coast Guard Research and Development Center, which was formed on 15 August 1974 and remained in existence until 6 May 1975. The Coast Guard commissioned *Flagstaff* on 8 November 1974 after having her hull painted white and the Coast Guard hull-stripe added. Her first commanding officer was LT Douglas F. Gehring, USCG. She operated out of San Diego and other California ports during the Coast Guard's evaluation. During her evaluation, *Flagstaff* was involved in a number of search and rescue cases. She was dispatched from Long Beach to investigate a report of a burning boat about 50 miles away. In about one hour the ship was on scene and quickly located a family of three who had jumped into the water to escape a flash fire which had engulfed the cabin of their 40-foot boat. *Flagstaff's* speed in arriving on scene was "a major factor in

saving the lives of the three." Ultimately the evaluation demonstrated that she showed promise in both anti-smuggling operations and as a rapid response search and rescue vessel. But machinery breakdowns, a lack of spare parts for her Rolls Royce turbine, and a collision with a gray whale off the Point Loma Lighthouse that caused $250,000 in damage to her aft strut gearing assembly (and killed the whale) soured the Coast Guard's hopes for her use. It was continually noted in reports that her operation was more like that of an airplane than a ship, particularly her wiring systems which were actually like the wiring used in aircraft. Concerns about weight, habitability, fuel consumption, and overall costs were also prevalent. Her evaluation period ended on 18 February 1975 and she was returned to the Navy.
The Coast Guard once again acquired the *Flagstaff* from the Navy on 29 September 1976 in San Diego for further evaluation "in a fully operational environment." She was transported to the East Coast for testing in the "adverse weather conditions" that prevailed in the waters off the New England in the hope of having her conduct actual operational missions. She was home-ported at Woods Hole, Massachusetts. The emphasis for this evaluation was to test her capabilities to enforce the new 200 mile fisheries economic zone, in addition to the traditional Coast Guard missions. The testing period was initially set to last 12 months.
After arriving on the East Coast, she required numerous repairs to her aging machinery, which was done in Boston. She was placed "In-Commission-Special" status as a Coast Guard cutter (WPBH-1) on 2 March 1977 after again receiving the Coast Guard livery. Her commanding officer was LT Terrance Hart, USCG. Two days later she transited from Boston to Woods Hole. She was under the operational control of the First District and the plan was to have her operate as a "normal district resource." It was thought that such use would permit comparison of her capabilities to the other District resources, i.e. HH-52As, HU-16Es, and surface craft. USCGC *Flagstaff* was placed "In-Commission Active" status on 17 July 1977.
Her use this time, however, was more problematic than the first testing period in 1974. She continually suffered mechanical breakdowns, including problems with her turbine, and the lack of spare parts forced the Coast Guard to extend her period of evaluation from 12 months to 16 months. Her crew spent most of their time attempting to repair her rather than patrolling and one officer likened her operation to that of an aircraft, requiring frequent repair. The difference being that an aircraft has a flight crew to operate the aircraft and a maintenance crew for its upkeep. The crew of the *Flagstaff*, however, had to do both, and were "overwhelmed with the maintenance workload, " and their morale consequently suffered. From 26 May 1977 until 27 October 1977, *Flagstaff* only managed 305.2 hours of operating time, including only 71.6 hours of foil-borne time. In March of 1978 she suffered a transmission failure and the nail in her coffin was the deterioration of her turbine. The only solution to the latter problem was to replace the turbine, and the cost of that was prohibitive. The Coast Guard decided to decommission her due to "the high cost of repairs and the fact that the CG feels sufficient information has been gained from the E.P. [Evaluation Period]."
She was decommissioned at Woods Hole on 30 September 1978 and returned to the Navy. The Coast Guard noted that: "sufficient information on the use of hydrofoils has been gathered from the evaluation program." The escalating costs of repair, and the fact that she needed an engine replacement too, figured into the decision to return her to the Navy.

Sources:

Flagstaff's Cutter History File. USCG Historian's Office, USCG HQ, Washington, D.C.

Robert Scheina. *U.S. Coast Guard Cutters & Craft, 1946-1990.* Annapolis, MD: Naval Institute Press, 1990.
